

What is claimed is:

1. An actuator for a data storage device, comprising:
an actuator comb having a pivot assembly aperture and an actuator arm;
a leading edge on the actuator arm;
a trailing edge on the actuator arm; and wherein
the leading edge and the trailing edge have aerodynamic profiles for reducing a
coefficient of air flow drag for the actuator arm.
2. The actuator of claim 1 wherein the leading and trailing edges are symmetrical.
3. The actuator of claim 1 wherein the leading and trailing edges have triangular cross-sectional shapes.
4. The actuator of claim 1 wherein the leading and trailing edges are tapered at their respective ends.
5. The actuator of claim 1 wherein each of the leading and trailing edges extends from the pivot assembly aperture to a suspension tongue.
6. The actuator of claim 1, further comprising a weight-reducing aperture located in an interior of the actuator arm, wherein the aperture has an aerodynamic profile for reducing a coefficient of air flow drag for the actuator arm.

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1 11. A hard disk drive, comprising:
2 a housing;
3 a spindle motor assembly mounted to the housing and having a central drive hub;
4 a data storage disk mounted to the spindle motor assembly;
5 a pivot assembly mounted to the housing;
6 an actuator mounted to the pivot assembly for movement relative to the disk, the
7 actuator having a voice coil, an arm with a suspension mounted thereto, a read/write head
8 on the suspension;
9 a leading edge on the arm;
10 a trailing edge on the arm; and wherein
11 the leading and the trailing edges have aerodynamic profiles for reducing a
12 coefficient of air flow drag for the arm.

13 12. The hard disk drive of claim 11 wherein the leading and trailing edges are
14 symmetrical.

15 13. The hard disk drive of claim 11 wherein the leading and trailing edges have
16 triangular cross-sectional shapes.

17 14. The hard disk drive of claim 11 wherein the leading and trailing edges are tapered
18 at their respective ends.

19 15. The hard disk drive of claim 11 wherein each of the leading and trailing edges
20 extends from the pivot assembly to the suspension.

21 16. The actuator of claim 11, further comprising weight-reducing apertures in the
22 arm, wherein each of the apertures is circumscribed with an aerodynamic profile for
23 reducing a coefficient of air flow drag for the actuator arm.